



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

EPA-R10-OAR-2012-0712; FRL-9817-1

Revision to the Washington State Implementation Plan; Tacoma-Pierce County Nonattainment Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The EPA is approving State Implementation Plan (SIP) revisions submitted by the Washington Department of Ecology (Ecology) dated November 28, 2012. The EPA's final rulemaking approves two revisions to the SIP. First, the EPA is approving the "2008 Baseline Emissions Inventory and Documentation" included as Appendix A to the SIP revision. The emissions inventory was submitted to meet Clean Air Act (CAA) requirements related to the Tacoma-Pierce County nonattainment area for the 2006 fine particulate matter (PM_{2.5}) National Ambient Air Quality Standard (NAAQS). Second, the EPA is approving updated rules submitted by Ecology on behalf of the Puget Sound Clean Air Agency (PSCAA), contained in Appendix B, "SIP Strengthening Rules." The updated PSCAA rules help implement the recommendations of the Tacoma-Pierce County Clean Air Task Force, an advisory committee of community leaders, citizen representatives, public health advocates, and other affected parties, formed to develop PM_{2.5} reduction strategies.

DATES: This final rule is effective **[insert date 30 days after publication in the Federal Register]**.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-R10-OAR-2012-0712. All documents in the docket are listed on the www.regulations.gov website.

Although listed in the index, some information is not publicly available, e.g., Confidential Business Information (CBI) or other information the disclosure of which is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy at the Air Programs Unit, Office of Air Waste and Toxics, EPA Region 10, 1200 Sixth Avenue, Seattle, WA, 98101. EPA requests that if at all possible, you contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section to view the hard copy of the docket. You may view the hard copy of the docket Monday through Friday, 8:00 a.m. to 4:00 p.m., excluding Federal holidays.

FOR FURTHER INFORMATION CONTACT: Jeff Hunt at telephone number: (206) 553-0256, e-mail address: hunt.jeff@epa.gov, or the above EPA, Region 10 address.

SUPPLEMENTARY INFORMATION:

Definitions

For the purpose of this document, we are giving meaning to certain words or initials as follows:

(i) The words or initials “Act” or “CAA” mean or refer to the Clean Air Act, unless the context indicates otherwise.

(ii) The words “EPA”, “we”, “us” or our mean or refer to the United States Environmental Protection Agency.

(iii) The initials “SIP” mean or refer to State Implementation Plan.

(iv) The words “Washington” and “State” mean the State of Washington.

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I. Background Information

Detailed information on the history of the PM_{2.5} NAAQS as it relates to the Tacoma-Pierce County nonattainment area is included in the EPA's proposal for this action (78 FR 4804, January 23, 2013). As discussed in the proposal, on September 4, 2012, the EPA published a final "clean data" determination of attainment, based upon complete certified ambient air monitoring data showing that the Tacoma-Pierce County nonattainment area met the 2006 PM_{2.5} NAAQS for the 2009-2011 monitoring period (77 FR 53772). Since the determination, monitored PM_{2.5} levels continue to decline in the Tacoma-Pierce County nonattainment area. Monitoring data for 2010-2012 show a preliminary design value of 28 µg/m³.¹

The clean data determination suspended the obligation for the State of Washington to submit an attainment demonstration, associated reasonably available control measures, a reasonable further progress plan, contingency measures, and other SIP revisions related to attainment of the standard for so long as the nonattainment area continues to meet the 2006 PM_{2.5} NAAQS. However, a clean data determination does not suspend the obligation under CAA section 172(c)(3) for submission and approval of a comprehensive, accurate, and current inventory of actual emissions. Accordingly, Ecology submitted Appendix A, titled "2008 Baseline Emissions Inventory and Documentation," of its November 28, 2012, SIP revision to

¹ A design value is a three year average used to determine compliance with the 2006 PM_{2.5} 24-hour NAAQS of 35 µg/m³. Final design values generally are certified in June or July after a complete quality assurance and quality control process.

meet the emissions inventory obligation under CAA section 172(c)(3). Ecology also submitted Appendix B of the SIP revision, titled “SIP Strengthening Rules,” which contained the most recent version of *Regulation 1 - Article 13: Solid Fuel Burning Device Standards*, adopted by the Puget Sound Clean Air Agency Board on October 25, 2012, imposing more stringent standards to control PM_{2.5} emissions from wood smoke. The EPA proposed to approve both Appendix A and Appendix B of Washington’s November 28, 2012, SIP revision consistent with sections 110 and 172 of the CAA.

II. Response to Comments

The EPA received no comment on its proposed approval of Appendix B. On February 22, 2013, EPA received one comment on its proposed approval of Appendix A. This comment, submitted by Mr. Robert Ukeiley on behalf of Sierra Club, focused on the potential impact of coal export terminals proposed for the Pacific Northwest. The commenter wrote that Ecology’s 2008 Baseline Emissions Inventory does not sufficiently address potential impacts as they relate to current or future shipments of coal via rail through the Tacoma-Pierce County nonattainment area. The EPA is responding to this comment in two parts: 1) Comment on Fugitive Coal Dust Emissions; and 2) Comment on Railroad Emission Calculations.

A. Comment on Fugitive Coal Dust Emissions

Comment: The commenter wrote that Ecology’s 2008 Baseline Emissions Inventory does not meet the CAA section 172(c)(3) requirement which states that, “[s]uch plan provisions shall include a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in such area, including such periodic revisions as the Administrator may determine necessary to assure the requirements of this part are met.” Specifically, the commenter wrote that the 2008 Baseline Emissions Inventory is not

comprehensive because it did not account for fugitive coal dust emissions from coal trains that may have transited through the nonattainment area. The commenter also requests that “[i]f the current fugitive coal dust emissions are zero because there are no coal trains traveling through the Tacoma nonattainment area, then the inventory should say that.”

Response: As noted in the proposal for this action, the EPA referred to the August 2005 “Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter NAAQS and Regional Haze Regulations” (hereafter “emissions inventory guidance” or “guidance”), to assess the adequacy of Washington’s submission. The guidance covers several elements related to this comment. First, the mobile source section in the guidance contains no discussion or requirement for calculating fugitive dust from locomotive payloads. Instead, fugitive dust emissions from all source categories are discussed in section 5.4 of the guidance addressing nonpoint sources. The guidance states, “[n]onpoint sources are generally described as those sources that are too small, numerous, or difficult to be inventoried individually. Potential nonpoint sources of emissions are given in Table 5.4-1 and potential crustal (dust) sources of PM emissions are in Table 5.4-2. These tables are presented as guides to assist State, local and Tribal agencies in focusing their nonpoint source emission inventory efforts.” The guidance goes on to state, “[t]he State, local and Tribal agencies may want to concentrate their efforts on the most significant source categories.” The guidance acknowledges that States cannot individually inventory all nonpoint source emissions, but should use the best available data to inform which nonpoint source categories to focus on in creating a comprehensive and accurate inventory of actual emissions.

As part of the effort to focus on the most significant source categories, Ecology conducted extensive speciation analysis included in the docket for the EPA’s proposed action,

see *Sources of Fine Particles in the Wapato Hills-Puyallup River Valley PM_{2.5} Nonattainment Area* (the name formerly used for the Tacoma-Pierce County nonattainment area), April 2010. Speciation analysis, also called receptor modeling or source apportionment, is a method of using chemical signatures from monitoring samples to determine both the types of emission sources impacting a monitor and the magnitude of those source impacts. The study examined monitoring samples from 2006 to 2009 and used chemical signature information to identify the relevant emission sources. Ecology determined that 4% of PM_{2.5} annually in the Tacoma-Pierce County nonattainment area originated from the combination of all fugitive dust sources. To put this number in perspective, the contribution from fugitive dust was only slightly greater than the PM_{2.5} contribution from sea salt. The percent contribution from fugitive dust was also found to be the lowest during winter months when violations of the 2006 PM_{2.5} standard occur. From an analysis of fugitive dust impacts and wind direction, Ecology concluded that the majority of the PM_{2.5} related fugitive dust was likely re-suspended dust from on-road motor vehicle traffic and fugitive emissions from a gravel operation near the monitoring site. Ecology's speciation analysis for the one violating Tacoma monitor on South L Street concluded by stating, "[f]ugitive dust was poorly correlated with total PM_{2.5} mass ($r^2 = 0.19$) indicating that its influence on the measured total mass was not significant."

As described above, the 2005 emissions inventory guidance recognizes that agencies may need to concentrate their efforts on the most significant source categories, and the closely related regulations at 40 CFR 51.20 for reporting under the National Emissions Inventory (NEI) also state, "[n]onpoint source categories or emission events reasonably estimated by the State to represent a de minimis percentage of total county and State emissions of a given pollutant may be omitted." Based on Ecology's analysis of fugitive dust impacts on 2006 PM_{2.5} concentrations

in the area, the EPA agrees with Ecology that fugitive dust emissions from railroad transport of coal do not constitute a significant source category for the 2008 Baseline Emissions Inventory. To the extent that the commenter raises issues related to coal export proposals that may impact the Tacoma-Pierce County nonattainment area in the future, or to the calculation of changes to the emission sources after 2008, the EPA has determined that these questions are beyond the scope of the 2008 Baseline Emissions Inventory. The inventory required under section 172(c)(3) does not require submission or assessment of future emissions.

The EPA also concludes that the 2008 Baseline Emissions Inventory accurately represents the emission sources that led to the EPA's nonattainment designation for Tacoma-Pierce County in 2009. In particular, the inventory informed and helped support development of the residential wood smoke control measures approved in this action. In 2008, residential wood combustion represented 74% of all emissions during the critical winter season, well above all other emission sources. To the extent that the mix of emission sources may change over time from the 2008 Baseline Emissions Inventory, the EPA believes these changes are best addressed as part of the maintenance plan inventory process to ensure continued compliance with the NAAQS, or as part of the attainment planning requirements that would become applicable should the area not continue in attainment. In response to the concerns raised by the commenter, the EPA independently analyzed publicly available data from the speciation monitor and found no evidence of increasing fugitive dust trends from 2008 to 2011. See *Tacoma PMF Soil Results*, included in the docket for this action. As noted previously, monitored PM_{2.5} levels in the nonattainment area continue to decline below the level of the NAAQS. For the reasons stated above, the EPA has determined that Ecology's 2008 Baseline Emissions Inventory is consistent with applicable guidance and satisfies the requirement of CAA section 172(c)(3).

B. Comment on Railroad Emission Calculations

Comment: The commenter notes that Ecology's 2008 Baseline Emissions Inventory submission includes only a summary of emissions from railroad locomotive diesel consumption, without the corresponding background information used to calculate the estimates. The commenter states that the background information is necessary for both public understanding and for future conformity obligations under the CAA.

Response: Since emission control measures for railroad locomotive traffic are generally formulated and managed at the federal level, it is understandable that the State SIP submission would include summary data rather than a more elaborate discussion of underlying data. Ecology did include an extensive explanation of the underlying data for the predominant source categories, such as residential wood combustion, which comprises 74% of the winter time inventory. By contrast, emissions from all nonroad vehicles and engines, including railroad locomotives, account for only 5% of wintertime inventory. Moreover, although Ecology included only summary results for railroad emissions, it clearly referenced the documentation used in calculating the final railroad diesel emissions, listed as endnotes 26, 27, and 28 in the 2008 Baseline Emissions Inventory SIP submission. These documents were available from Ecology and the EPA during the comment period, and remain available for public review. Neither the EPA nor Ecology has received a request for these documents. For the convenience of the reader these background documents have been added to the docket for this action.

The comment only questions the level of detail in the discussion of the locomotive emission calculations and states that a comprehensive and accurate emissions inventory must provide figures of gallons of diesel consumed and emission factors or other calculations used in the emissions estimates. The availability of the additional detail requested by the comment is

described above. Specifically, the emission factors were based on standard EPA emission factors for locomotives and fuel consumption data was provided by the rail freight carriers operating in the area. As the comment notes, these data are part of the comprehensive and accurate emissions inventory required by section 172(c)(3), and were appropriately relied upon by Ecology to calculate diesel emissions from locomotives. The EPA independently calculated the locomotive emissions estimates based on the information referenced in endnotes 26, 27, and 28 of the State's emissions inventory SIP submission, and obtained results that were consistent with the State's (see *EPA review of emission calculations.xlsx*).

To the extent that the commenter raises issues related to future conformity determinations or potential coal export proposals that may impact the Tacoma-Pierce County nonattainment area in the future, or to the calculation of changes to the emission sources after 2008, the EPA has determined that these questions are beyond the scope of the 2008 Baseline Emissions Inventory and the requirements of section 172(c)(3).

III. Final Action

The EPA has determined that Washington's SIP revisions, dated November 28, 2012, are consistent with sections 110 and 172 of the CAA. Therefore, we are approving the SIP revisions, specifically Appendix A, "2008 Baseline Emissions Inventory and Documentation" and Appendix B, "SIP Strengthening Rules."

IV. Statutory and Executive Orders Review

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely

approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and

- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the rule neither imposes substantial direct compliance costs on tribal governments, nor preempts tribal law. Therefore, the requirements of section 5(b) and 5(c) of the Executive Order do not apply to this rule. Consistent with EPA policy, the EPA nonetheless provided a consultation opportunity to the Puyallup Tribe in a letter dated December 11, 2012. The EPA did not receive a request for consultation.

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [FEDERAL REGISTER OFFICE: insert date 60 days from date of publication of this document in the Federal Register]. Filing a petition for reconsideration by the Administrator of this final rule

does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Visibility, and Volatile organic compounds.

Dated May 13, 2013

Dennis J. McLerran
Regional Administrator
Region 10.

40 CFR part 52 is amended as follows:

PART 52 - APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for Part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart WW - Washington

2. Section 52.2470 is amended:

a. In paragraph (c) Table 4 by revising entries 13.01 through 13.05, adding in numerical order entry 13.06, and revising entry 13.07.

b. In paragraph (e) by adding a heading for “Recently Approved Plans” and a new entry for “Particulate Matter (PM_{2.5}) 2008 Baseline Emissions Inventory and SIP Strengthening Rules” at the end of the table.

§ 52.2470 Identification of plan.

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TABLE 4 – PUGET SOUND CLEAN AIR AGENCY REGULATIONS

| State citation | Title/subject | State adopted date | EPA approval date | Explanations |
|---|----------------------|---------------------------|---|---------------------|
| * * * * * | | | | |
| Regulation 1 – Article 13: Solid Fuel Burning Device Standards | | | | |
| 13.01 | Policy and Purpose | 10/25/12 | [Insert <u>Federal Register</u> publication date] [Insert page number where the document begins] | |
| 13.02 | Definitions | 10/25/12 | [Insert <u>Federal Register</u> | |

| | | | | |
|-----------|---|----------|--|--|
| | | | publication date] [Insert page number where the document begins] | |
| 13.03 | Opacity Standards | 10/25/12 | [Insert <u>Federal Register</u> publication date] [Insert page number where the document begins] | |
| 13.04 | Allowed and Prohibited Fuel Types | 10/25/12 | [Insert <u>Federal Register</u> publication date] [Insert page number where the document begins] | |
| 13.05 | Restrictions on Operation of Solid Fuel Burning Devices | 10/25/12 | [Insert <u>Federal Register</u> publication date] [Insert page number where the document begins] | |
| 13.06 | Emission Performance Standards | 10/25/12 | [Insert <u>Federal Register</u> publication date] [Insert page number where the document begins] | |
| 13.07 | Prohibitions on Wood Stoves that are not Certified Wood Stoves | 10/25/12 | [Insert <u>Federal Register</u> publication date] [Insert page number where the document begins] | |
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State of Washington Nonregulatory Provisions and Quasi-Regulatory Measures

| Name of SIP provision | Applicable geographic or nonattainment area | State submittal date | EPA approval date | Comments |
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| * * * * * | | | | |
| Recently Approved Plans | | | | |
| Particulate Matter (PM _{2.5}) 2008 Baseline Emissions Inventory and SIP Strengthening Rules | Tacoma, Pierce County | 11/28/12 | [Insert <u>Federal Register</u> publication date] [Insert page number where the document begins] | |

[FR Doc. 2013-12514 Filed 05/28/2013 at 8:45 am; Publication Date:
05/29/2013]